

Our Reference: SPM-364-A

PATENT

**SECOND SUBSTITUTE SPECIFICATION
FLUID PUMP FOR MEDICAL PURPOSES
AND MEASURING CHAMBER THEREFOR**

[0001] The invention relates to a fluid pump and a measuring chamber.

BACKGROUND OF THE INVENTION

[0002] Patent specification DE 195 25 926 C1 discloses a peristaltic pump system in which a measuring device is inserted into the pump system hose line after the pump. This measuring device downstream of the pump determines the fluid transport volume of the pump by pressure measurement. In this case the measuring device is built up in simple manner as a block so that it can be removed from a mounting in order that the test housing can be disinfected without complication. At the same time the fluid pressure is transmitted from the interior of the test housing to the outside via openings which are covered tightly by a membrane.

[0003] In so doing the test housings can be built up of reusable measuring chambers to be disinfected, or alternatively, of single-use products packed in a sterile manner. Due, however, to the removability of the measuring chamber or the design of the measuring chamber as a separate, exchangeable accessory part, a critical and serious disadvantage, especially in the field of medicine, arises in that a measuring chamber which is actually destined and suitable for a certain first pump system is inadvertently employed in a different pump system, the result of which may be that the proper functioning of the latter pump system may be put into question.

[0004] This is especially the case, for example, when pump systems with their respective measuring chambers are on hand from different manufacturers as accessories and the measuring chambers from a first manufacturer can be inserted into the pump systems of a different manufacturer (such as when the external dimensions of the measuring chambers from the different manufacturers are identical to one another) but pressure measuring properties of the measuring chambers differ from manufacturer to manufacturer. This can cause faulty operation of the pump systems.

Substitute Specification
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